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## **Fostering Pediatric Resilience in Outpatient Primary Care: An Evidence-Based Practice Improvement Project**

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# Pediatric Resilience in Primary Care – Practice Improvement

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## Background

Resilience is multifactorial and includes social-emotional, behavioral, intrapersonal, cognitive, and interpersonal skills and factors. These can be learned and/or promoted to increase one’s capacity for resilience. Children will experience stress and may face adverse childhood experiences (ACEs) that can have long-term consequences. This raises the issue of how to proactively address resilience throughout childhood and provide appropriate interventions throughout all stages of neuropsychological and physical development, not only after negative situations arise. Healthcare providers are in an ideal position to address, educate, and provide anticipatory guidance on age-appropriate, evidence-based resilience promoting techniques.

## Theoretical Framework

The Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) model – comprised of the three interconnected core components of inquiry, practice, and learning – was the guiding model used for this project. In addition, Lewin’s theory of change was utilized throughout project implementation.

## Synthesis of Evidence

Healthcare providers are in an ideal position to educate patients and families, identify individuals at risk for poor resilience skills and adverse childhood experiences (ACEs), discuss and promote positive family dynamics, and increase awareness and knowledge of resilience skills and techniques to patients and their families.

Statements in support of project based on evidence:

1. There is good and consistent evidence to recommend promoting resilience knowledge and techniques in all children and adolescents.
2. There is good and consistent evidence to recommend the promotion of resilience knowledge and techniques via implementation in pediatric primary healthcare settings by healthcare practitioners.

## Project Setting

This project was implemented at a pediatric school-based healthcare practice in a large (88 schools) urban school district in East Tennessee. The practice is a collaboration between the school district and a public university’s College of Nursing.

To ensure the protection and safety of participants, guidance was sought from the university’s director of Human Research Protection Program who determined that this project did not require Institutional Review Board (IRB) review since the activities did not meet the definition of research as defined by federal regulations.

## Project Aim

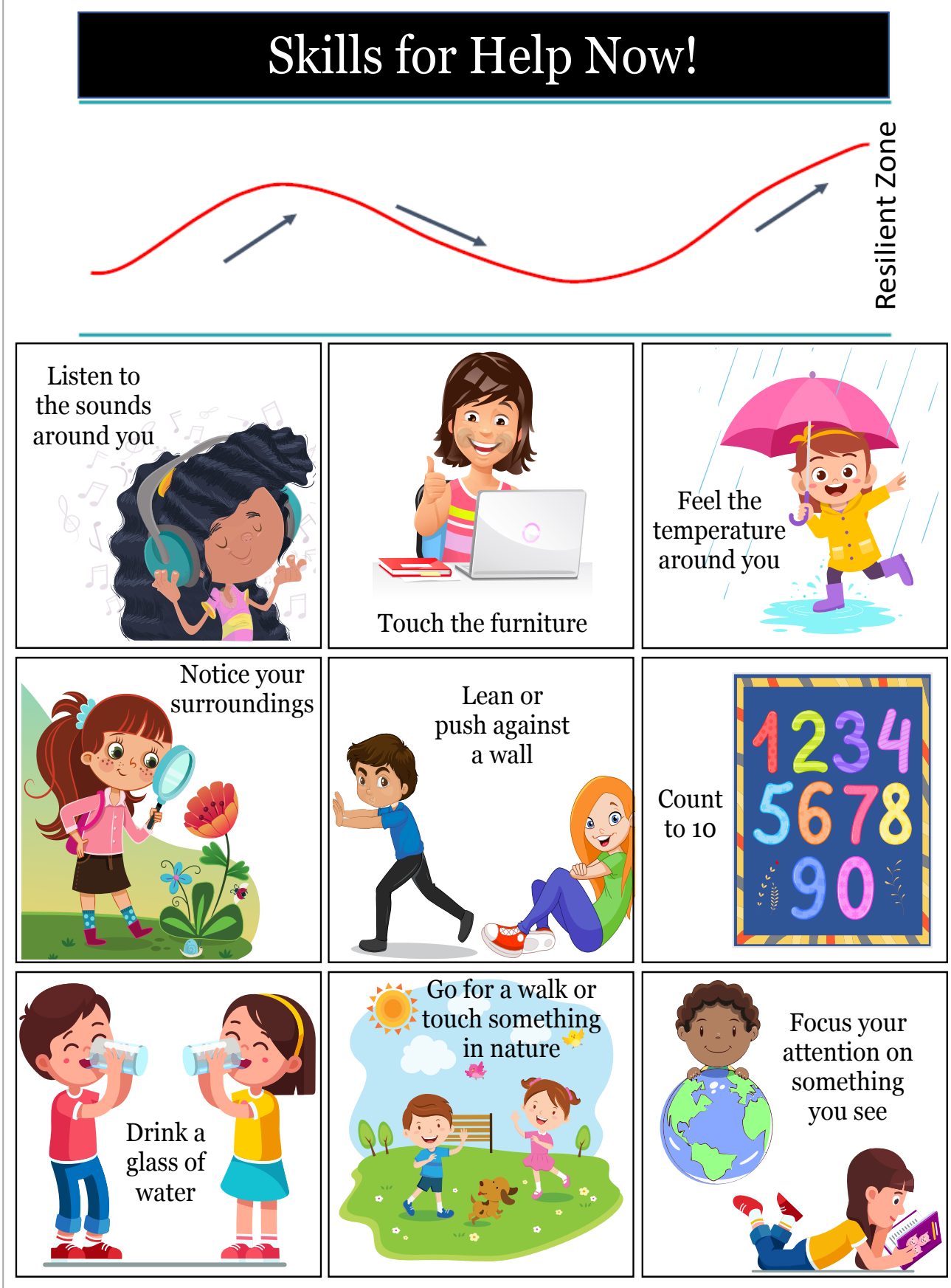
Evaluate how implementation of resilience promotion education and/or techniques in advanced practice registered nurses (APRNs) influences their knowledge and comfort with resilience promoting techniques; and the perceptions that the caregivers of pediatrics patients hold regarding the use of these resilience interventions over a three-month period.

## Methods

### Educational Intervention for APRNs

1. Baseline knowledge assessment
2. Educational session using specific components and/or techniques from the Community Resiliency Model (CRM)<sup>®</sup>
3. Post-educational intervention assessment

### Clinical Intervention



1. APRNs integrated resilience and CRM knowledge and techniques into clinical practice from September through December 2020, particularly during mental health care visits (e.g., attention-deficient hyperactivity disorder, anxiety, depression etc.) in patients aged four to 18 years.
2. Immediately after a patient encounter in which the APRNs implemented resilience knowledge or CRM techniques, the APRN provided a five-item questionnaire to the child’s caregiver.
3. After the three months of clinical integration, the APRNs completed a follow-up assessment.

## Results:

### Advance Practice Registered Nurses (APRNs)

APRNs had increased comfort in discussing resilience promotion techniques, comfort modeling/demonstrating resilience promotion techniques, and perceived feasibility of integration of resilience promotion techniques during patient encounters in a timely manner. This supports the statement that primary care healthcare providers are in an ideal position to address, educate, and provide anticipatory guidance on age-appropriate, evidence-based resilience promoting techniques.

### Caregivers

Caregiver survey data showed that, on average, resilience techniques were believed to be helpful and that the techniques learned were anticipated to be used after the patient encounter. These findings indicate that caregivers have a positive perception regarding the use of resilience techniques during primary care patient encounters.

Table 1			
APRNs: Baseline, Post-education, and Post-Integration Data (N = 2)			
	Baseline	Post-education	Post-integration
All stressful experiences in childhood and adolescence have significant potential to negatively impact short- and long-term wellbeing.	5 ± 0	5 ± 0	4.5 ± 0.7
Stressful experiences during childhood and adolescence can increase the risk for heart disease, chronic obstructive pulmonary disease, sexually transmitted diseases, and cerebrovascular strokes later in life.	4.5 ± 0.7	4.5 ± 0.7	4.5 ± 0.7
Interventions aimed at influencing brain development must be implemented in infancy and toddlerhood since brain plasticity ceases when an individual reaches childhood.	2 ± 1.4	2 ± 1.4	1.5 ± 0.7
Resilience skills in childhood and adolescence do not mitigate the immediate and long-term effects of stress and trauma.	3 ± 2.8	3 ± 2.8	1.5 ± 0.7
I believe that it is important to integrate resilience knowledge and promotion skills into routine clinical practice.	5 ± 0	5 ± 0	5 ± 0
I feel comfortable discussing resilience promotion techniques with patients during office visits.	4 ± 0	4.5 ± 0.7	4.5 ± 0.7
I feel comfortable modeling/demonstrating resilience promotion techniques with patients during office visits.	3 ± 0	4.5 ± 0.7	4.5 ± 0.7
I believe it is feasible to integrate resilience promotion techniques with patients during routine office visits in a timely manner.	3.5 ± 0.7	4.5 ± 0.7	4.5 ± 0.7
It took a minimal amount of time (< 5 minutes) to integrate resilience promotion techniques during routine office visits.	N/A	N/A	4.5 ± 0.7
Integrating resilience promotion techniques into routine office visits has been beneficial to the health and wellbeing of my patients.	N/A	N/A	5 ± 0
Note. Likert scale utilized. 1 = Strongly disagree; 2 = Somewhat disagree; 3 = Neither agree/disagree; 4 = Somewhat agree; 5 = Strongly agree.			

Table 2	
Caregiver Questionnaire Data (N = 14)	
Questions	Averages
My child is aware of his/her own strengths and feelings and handles stress well.	3 ± 1.2
My child has experienced more stressful life events than other children.	3.4 ± 1.6
I feel that my child can use the activities shown today to help calm down when stressed.	3.9 ± 0.8
I think it was helpful to talk about and show the calming activities during my child’s visit today.	4.1 ± 0.9
I think my child will try the calming activities shown at today’s visit at home.	4 ± 0.7
Note. Likert scale utilized. 1 = Definitely not true; 2 = Probably not true; 3 = Not sure; 4 = Probably true; 5 = Definitely true.	

## Conclusion

Strong resilience skills have been shown to result in significantly improved outcomes in short- and long-term outcomes, and there are no known risks to patients who utilize the resilience promotion skills of CRM. Findings from this project lend support to the recommendations that resilience should be proactively addressed during patient encounters, and that healthcare providers are in an ideal position to discuss and model evidence-based resilience-promoting techniques.

## Limitations

This project was implemented during a global pandemic which influenced the number of patients and clinical sites. The small sample sizes prevent strong conclusions from being deduced and general recommendations from being created.

## Implications/Recommendations

Generally, APRNs have little control over an individual’s external environment (e.g., parents/caregivers, friends, schools, community, etc.); however, APRNs can aid in the development of internal strengths that promote resilience.